

ABSTRACT

An ultrasonic inspection system is used to inspect grinding wheels used to prepare work rolls used in metal sheet production. The grinding wheel inspection system includes a test stand adapted to rotatably support a grinding wheel. An ultrasonic transmitting and receiving apparatus passes sound waves through the body of the grinding wheel. The attenuation of the sound waves passed through the grinding wheel is recorded in a recording device and analyzed in a computer. The recording device, which may be the computer, preferably records amplitude attenuation of the sound waves. The computer analyzes the amplitude attenuation, records the amplitude attenuation as an indicated density profile, and displays the indicated density profile on a computer screen for inspection. The indicated density profile of the inspected grinding wheel may be compared with indicated density profiles of other grinding wheels, particularly those with known operational characteristics.